\textbf{\LaTeX\ 2ε Cheat Sheet}

\textbf{Document classes}
- \texttt{book}: Default is two-sided.
- \texttt{report}: No \texttt{part} divisions.
- \texttt{article}: No \texttt{part} or \texttt{chapter} divisions.
- \texttt{letter}: Letter (?).
- \texttt{slides}: Large sans-serif font.

\textbf{Common documentclass options}
- \texttt{10pt/11pt/12pt}: Font size.
- \texttt{letterpaper/slandscape}: Paper size.
- \texttt{twocolumn}: Use two columns.
- \texttt{landscape}: Landscape orientation. Must use dvips -t landscape.
- \texttt{draft}: Double-space lines.
- \texttt{overfullrule}: Usage. \texttt{\usepackage{overfull} \overfullrule=1pt}.

\textbf{Title}
- \texttt{author}: Author of document.
- \texttt{title}: Title of document.
- \texttt{date}: Date.
- \texttt{maketitle}: Goes before \texttt{begin(document)}. The declaration \texttt{maketitle} goes at the top of the document.

\textbf{Miscellaneous}
- \texttt{pagestyle}: Empty header, footer and no page numbers.
- \texttt{tableofcontents}: Add a table of contents here.

\textbf{Document structure}
- \texttt{\part}: \texttt{\subsubsection}.
- \texttt{\chapter}: \texttt{\paragraph}.
- \texttt{\section}: \texttt{\subsection}.

\textbf{Text environments}
- \texttt{\begin{comment}}: Comment (not printed).
- \texttt{\begin{quote}}: Indented quotation block.
- \texttt{\begin{verbatim}}: Verbatim text.

\textbf{Text properties}

\textbf{Fonts}
- \texttt{\textfamily}: \texttt{\textsl}, \texttt{\textbf}, \texttt{\textsc}.
- \texttt{\selectfont}: \texttt{\texttt}.

\textbf{Text-mode symbols}
- \texttt{\& \&}: \texttt{\&}
- \texttt{\texttt}: \texttt{\texttt}.
- \texttt{\%}: \texttt{\%}

\textbf{Dashes}
- \texttt{\textbullet}: X-ray
- \texttt{\textbackslash}: In words.
- \texttt{\textemdash}: Between numbers.
- \texttt{\textemdash}: Yes—or no?

\textbf{Line and page breaks}
- \texttt{\textbackslash \textbackslash}: Begin new line without new paragraph.
- \texttt{\textbackslash \textbar \textbar}: Prohibit pagebreak after linebreak.
- \texttt{\texttt}: Don't print current line.
- \texttt{\textbar}: Start new page.
- \texttt{\texttt}: Do not indent current line.

\textbf{Miscellaneous}
- \texttt{\texttt}: Horizontal space of length \texttt{1}\texttt{pt}, \texttt{\texttt}: Vertical space of length \texttt{1}\texttt{pt}.
- \texttt{\texttt}: Line of width \texttt{w}\texttt{pt} and height \texttt{h}\texttt{pt}.
tabular environment
\begin{array}{|c|c|c|}
\hline
1 & 2 & 3 \\
\hline
\end{array}

\begin{array}{|c|c|c|}
\hline
1 & 2 & 3 \\
\hline
\end{array}

\begin{tabular}{|c|c|c|}
\hline
1 & 2 & 3 \\
\hline
\end{tabular}

Math mode
For inline math, use \( \ldots \) or \$ \ldots \$. For displayed math, use \[
\ldots \]
\end{document}

Citation types
\cite{key} Full author list and year. (Watson and Crick 1953)
\citeA{key} Full author list. (Watson and Crick)
\citeB{key} Full author list and year. Watson and Crick (1953)
\shortcite{key} Abbreviated author list and year. ?
\shortciteA{key} Abbreviated author list. ?
\shortciteB{key} Abbreviated author list and year. ?
\citeyear{key} Cite year only. (1953)
All the above have an \textbf{NP} variant without parentheses; Ex. \citeNP{keyNP}

BibTeX entry types
@article Journal or magazine article.
@book Book with publisher.
@booklet Book without publisher.
@conference Article in conference proceedings.
@inbook A part of a book and/or range of pages.
@incollection A part of book with its own title.
@misc If nothing else fits.
@phdthesis PhD. thesis.
@proceedings Proceedings of a conference.
@techreport Tech report, usually numbered in series.
@unpublished Unpublished.

BibTeX fields
address Address of publisher. Not necessary for major publishers.
author Names of authors, of format ... 
booktitle Title of book when part of it is cited.
chapter Chapter or section number.
editor Names of editors.
institution Sponsoring institution of tech. report.
journal Journal name.
key Used for cross ref. when no author.
month Month published. Use 3-letter abbreviation.
note Any additional information.
number Number of journal or magazine.
organization Organization that sponsors a conference.
pages Page range (2,6,9--12).
publisher Publisher's name.
school Name of school (for thesis).
sert Title of work.
type Type of tech. report, ex. “Research Note”.
volume Volume of a journal or book.
year Year of publication.

Bibliography and citations
When using BibTeX, you need to run \texttt{latex}, \texttt{bibtex}, and \texttt{latex}
twice more to resolve dependencies.

\begin{document}
\maketitle
\begin{table}
\begin{tabular}{|l|c|c|}
\hline
first & second & third \\
\hline
\end{tabular}
\end{table}
\end{document}

Sample BibTeX document
\documentclass[12pt]{article}
\usepackage{a4wide}
\begin{document}
\maketitle
\section{Introduction}
\subsection{Background}
\end{document}

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